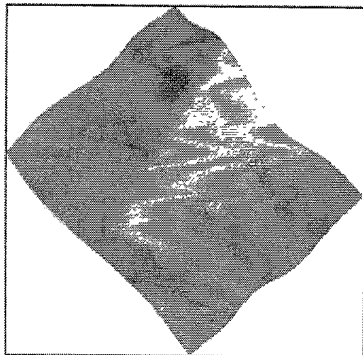
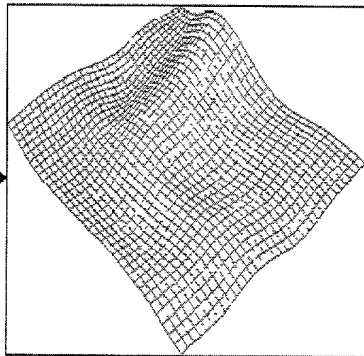


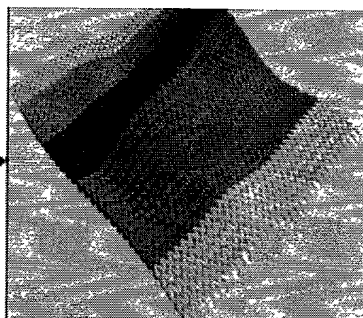
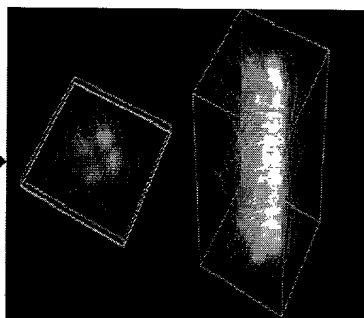
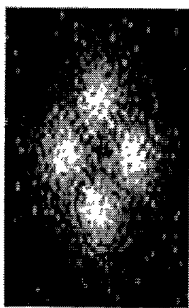
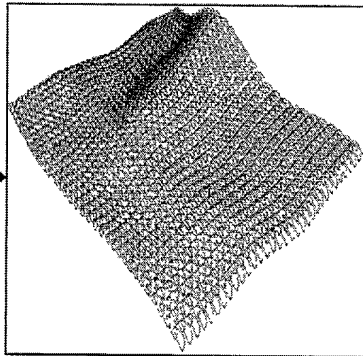
*Fig. 1*



*Fig. 2*



*Fig. 3a*

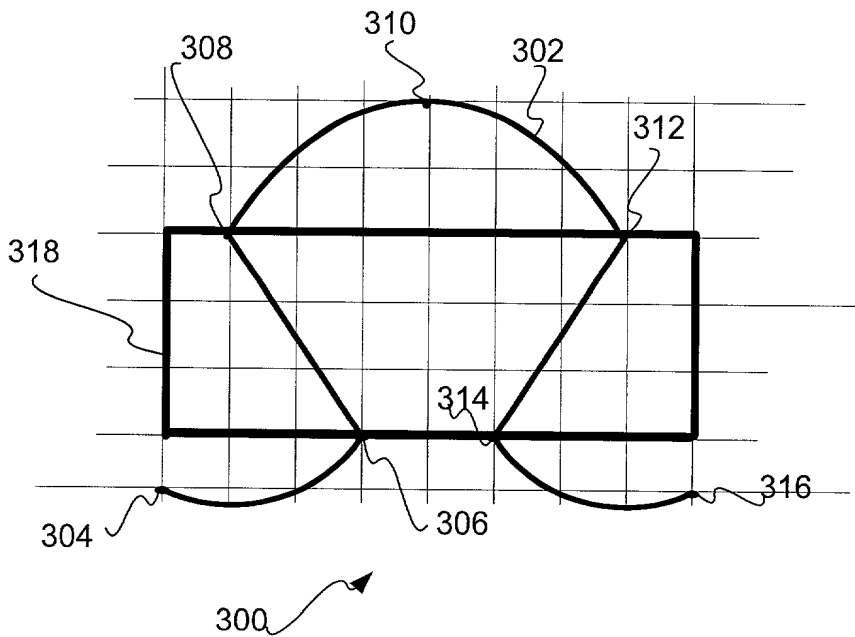


*Fig. 4*

*Fig. 5*

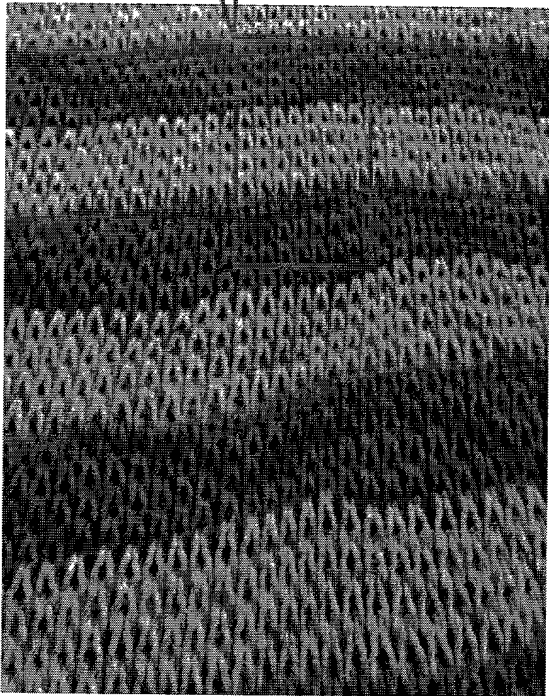
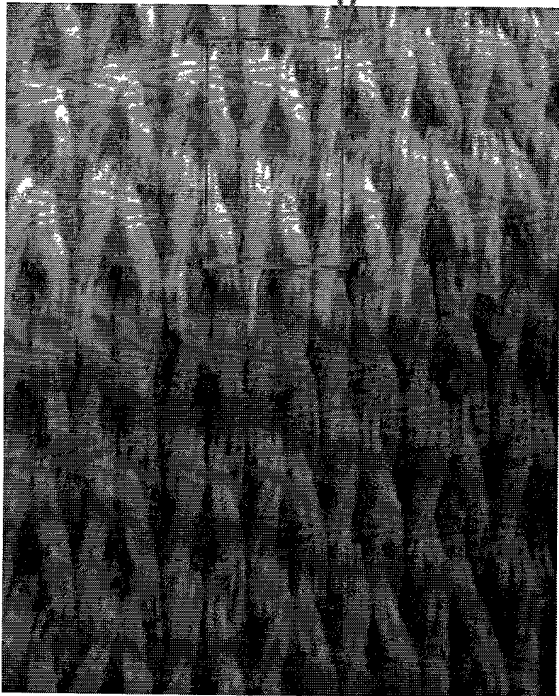
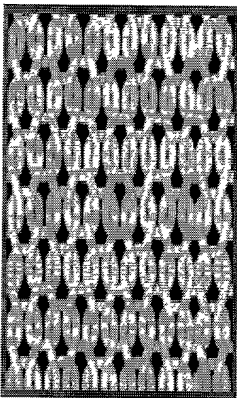
*Fig. 6*

*Fig. 3b*



*Fig. 7a*

*Fig. 7c*



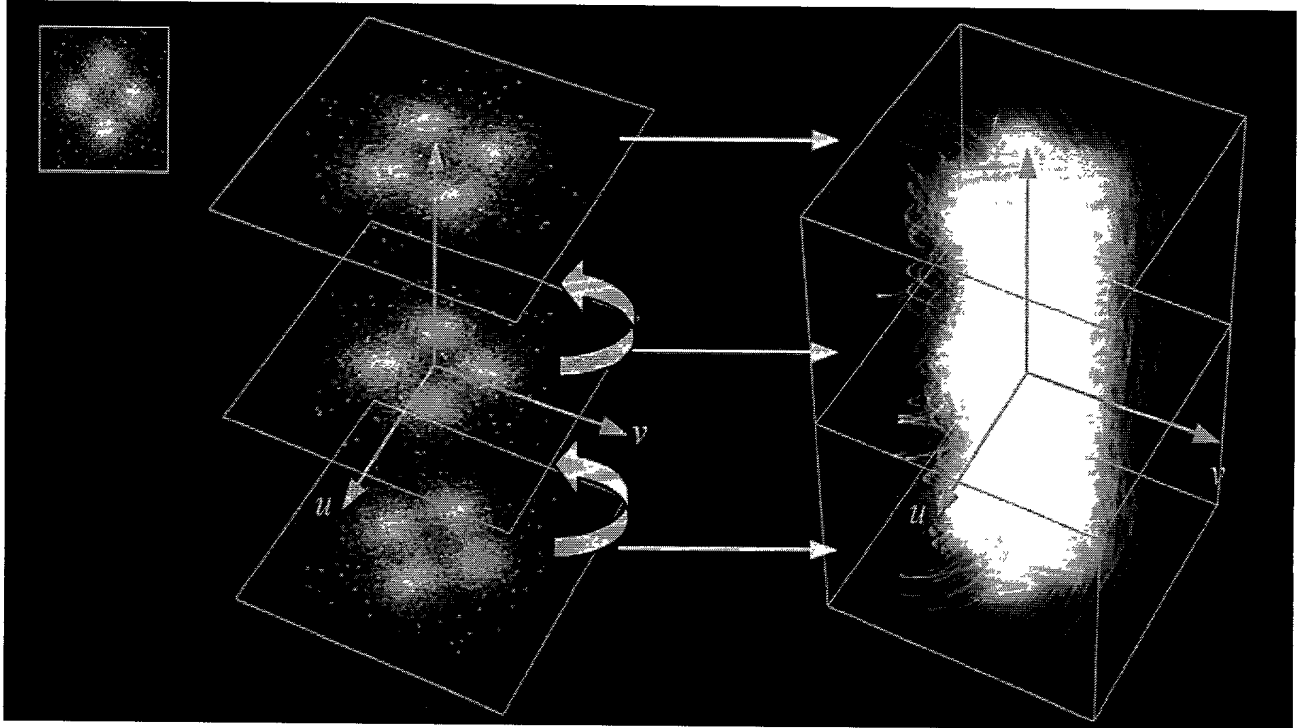
*Fig. 7b*

*Fig. 7d*

T.00T.00" 4.3232560

*Fig. 8a Fig. 8b*

*Fig. 8c*



*Fig. 9a*

*Fig. 9b*

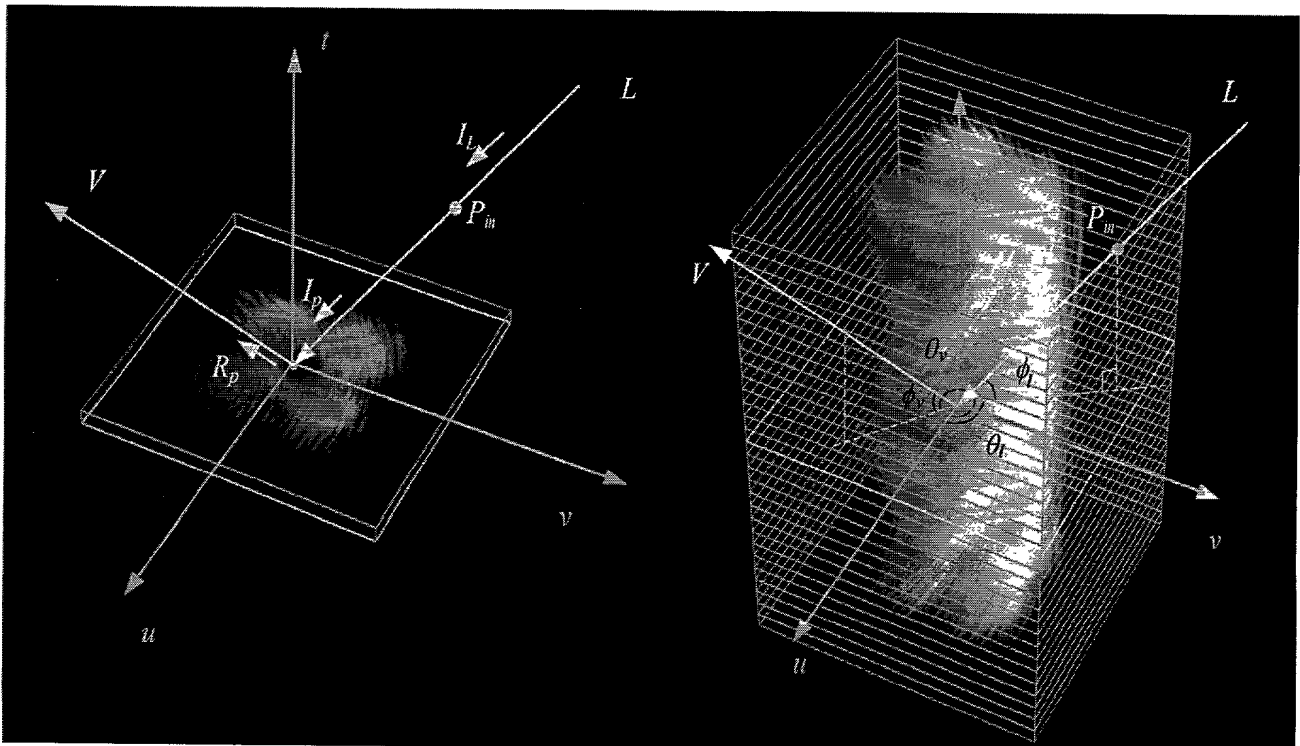


FIG. 8a FIG. 8b FIG. 8c

SCANNED # 10

Fig. 10a

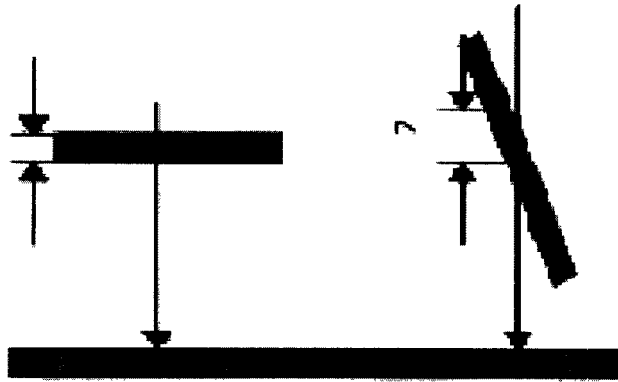


Fig. 10b

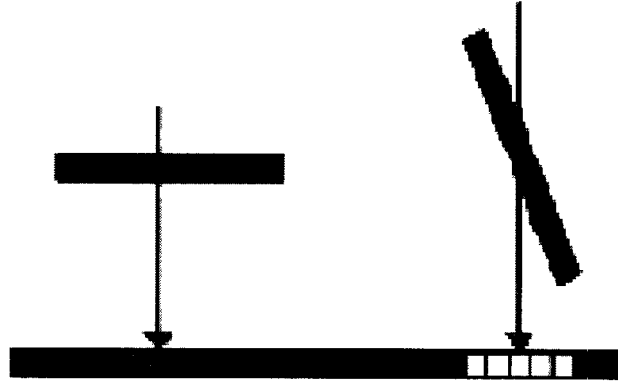
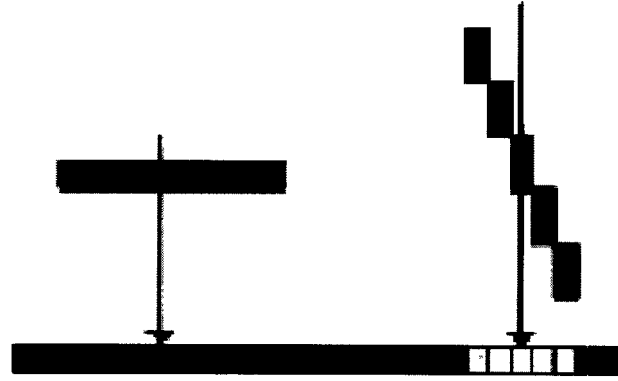


Fig. 10c



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Fig. 11a

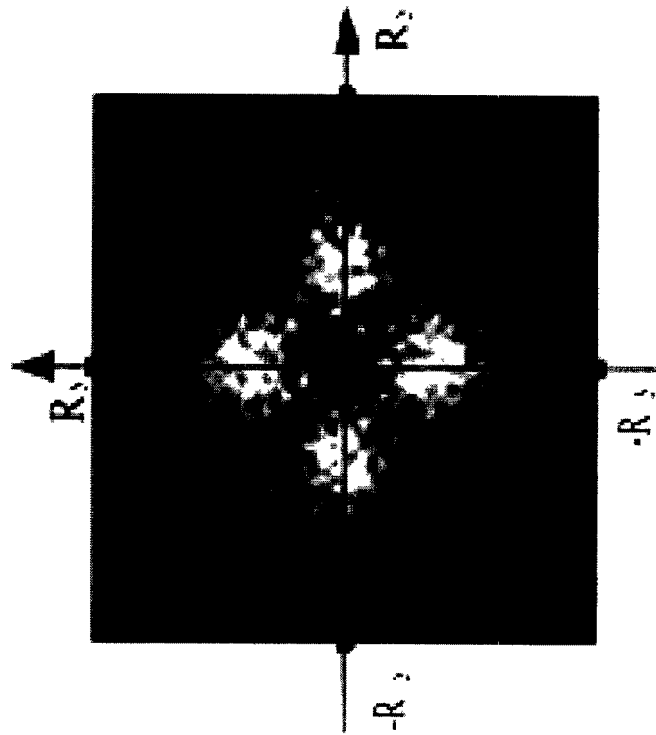
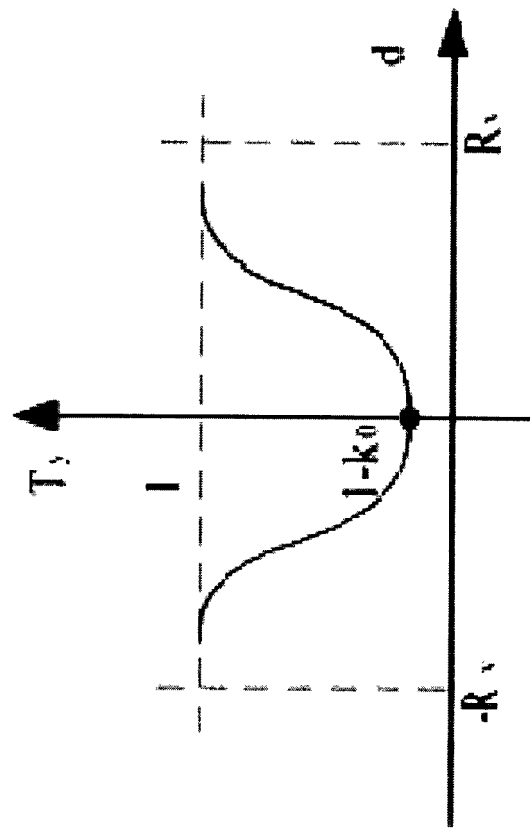
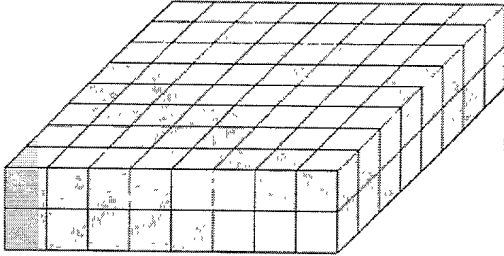


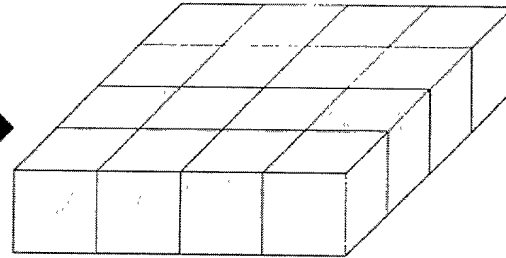
Fig. 11b



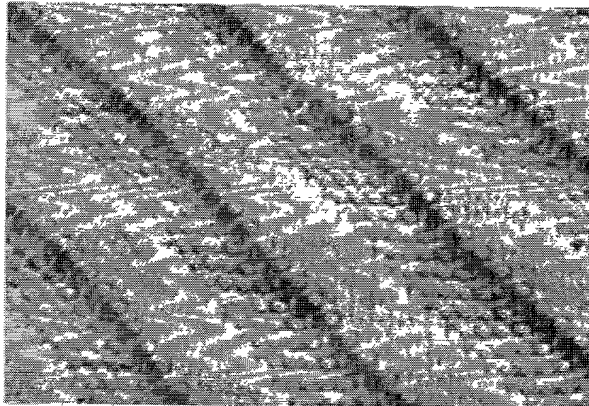
*Fig. 12a*



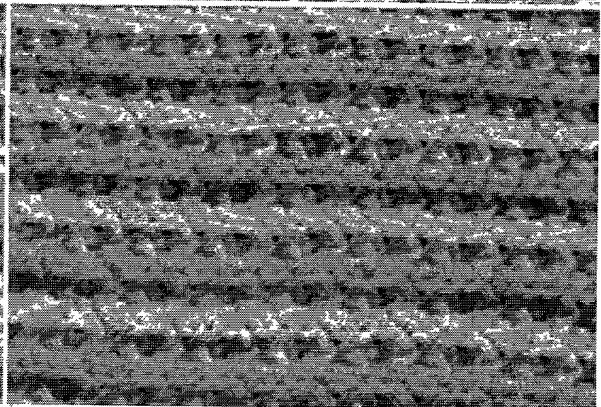
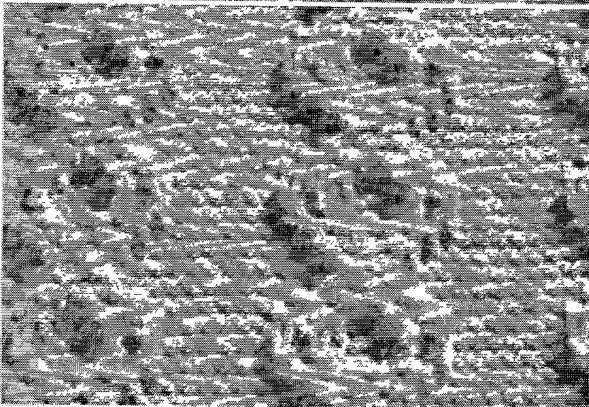
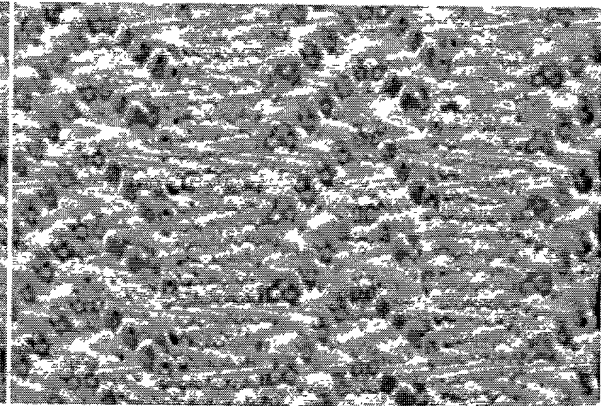
*Fig. 12b*



*Fig. 16a*



*Fig. 16b*

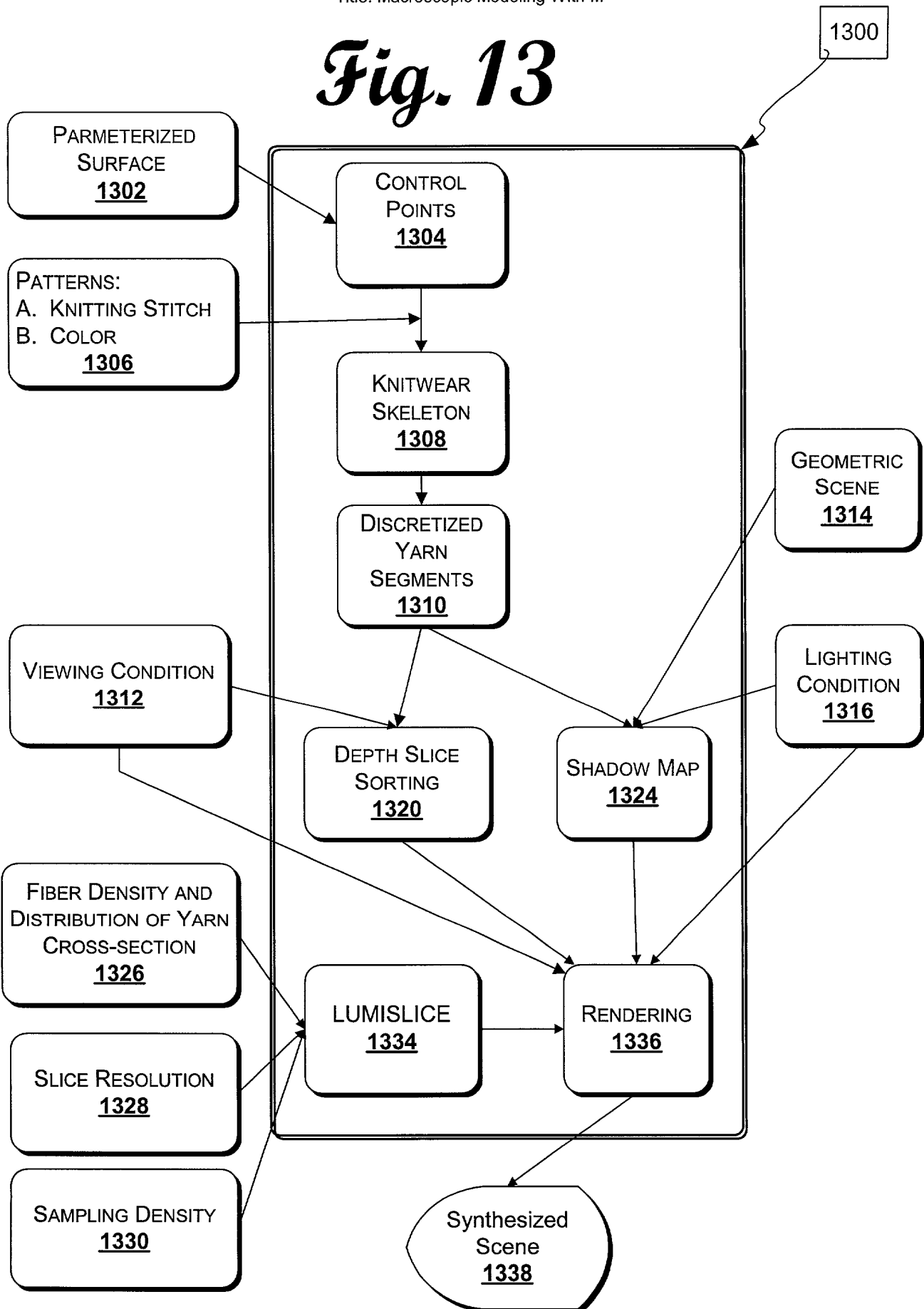


*Fig. 16c*

*Fig. 16d*

FIG. 12a, FIG. 12b, FIG. 16a, FIG. 16b, FIG. 16c, FIG. 16d

*Fig. 13*



# Fig. 14

1402

CREATE SHADOW MAP

1404

Draw Color and Depth of Geometric Objects From View point  
in 1<sup>st</sup> Buffer

1406

Bit Map Yarn into Cylindrical Polygons in 1<sup>st</sup> Image Buffer:  
Pixels Covered by Yarn: Set to '0'  
Pixels Not Covered by Yarn: Set to '1'

1408

Draw Geometric Objects with Shadow Test;  
Save Pixels in 2<sup>nd</sup> Image Buffer

1410

Sort All Discrete Yarn Segments by Distance From Viewpoint

1412

Disable Depth Test;  
Draw Unoccluded Volumetric Yarn on Sorted,  
Discrete Yarn Segments Pixels Into 3<sup>rd</sup> Image Buffer

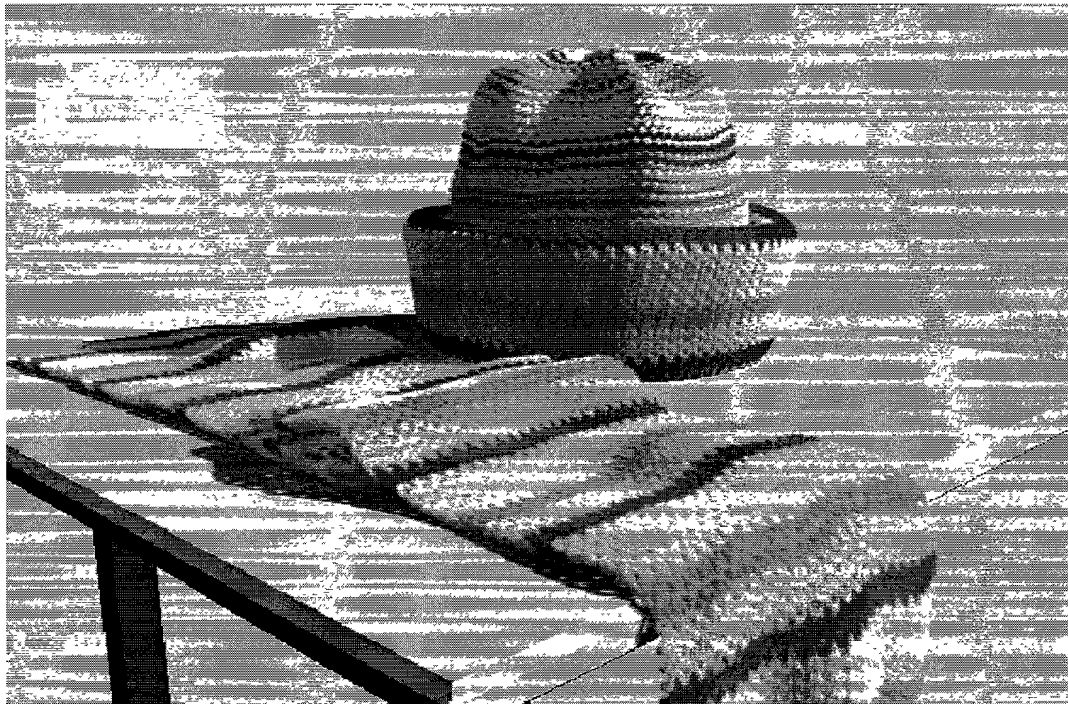
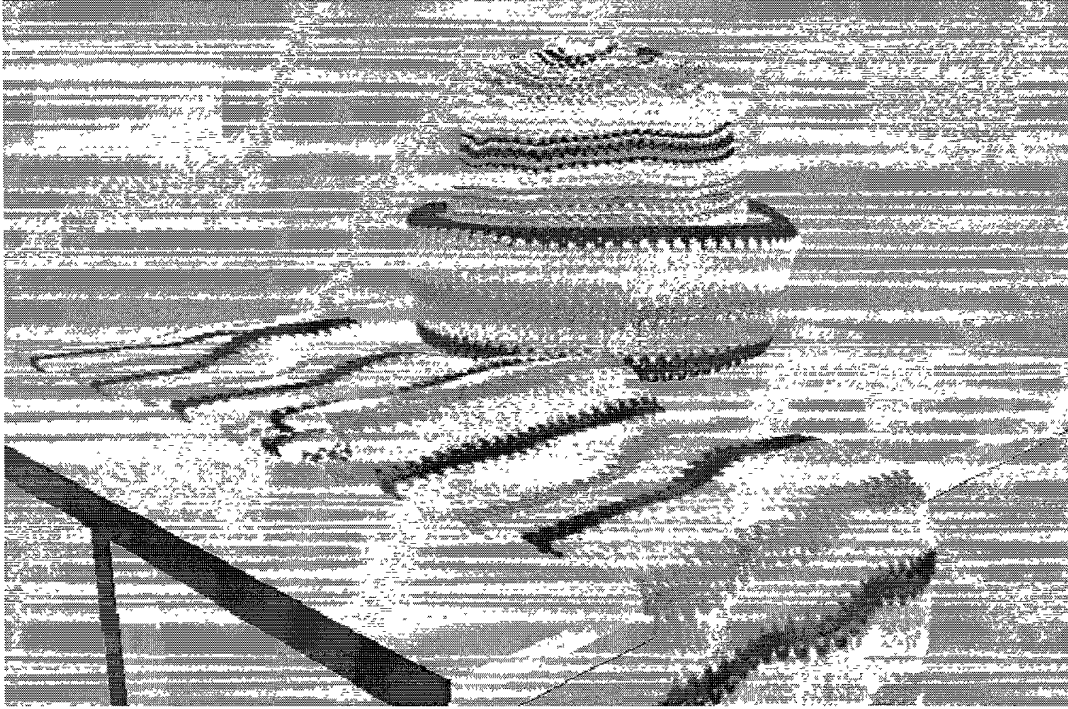
1414

For Every Pixel in 3<sup>rd</sup> Image Buffer  
Having '1' in the Corresponding Pixel in 1<sup>st</sup> Image Buffer:  
Replace With Color of Corresponding Pixel in 2<sup>nd</sup> Image Buffer

FIG. 14 is a flowchart illustrating a process for rendering a scene with yarn.



*Fig. 15a*



*Fig. 15b*

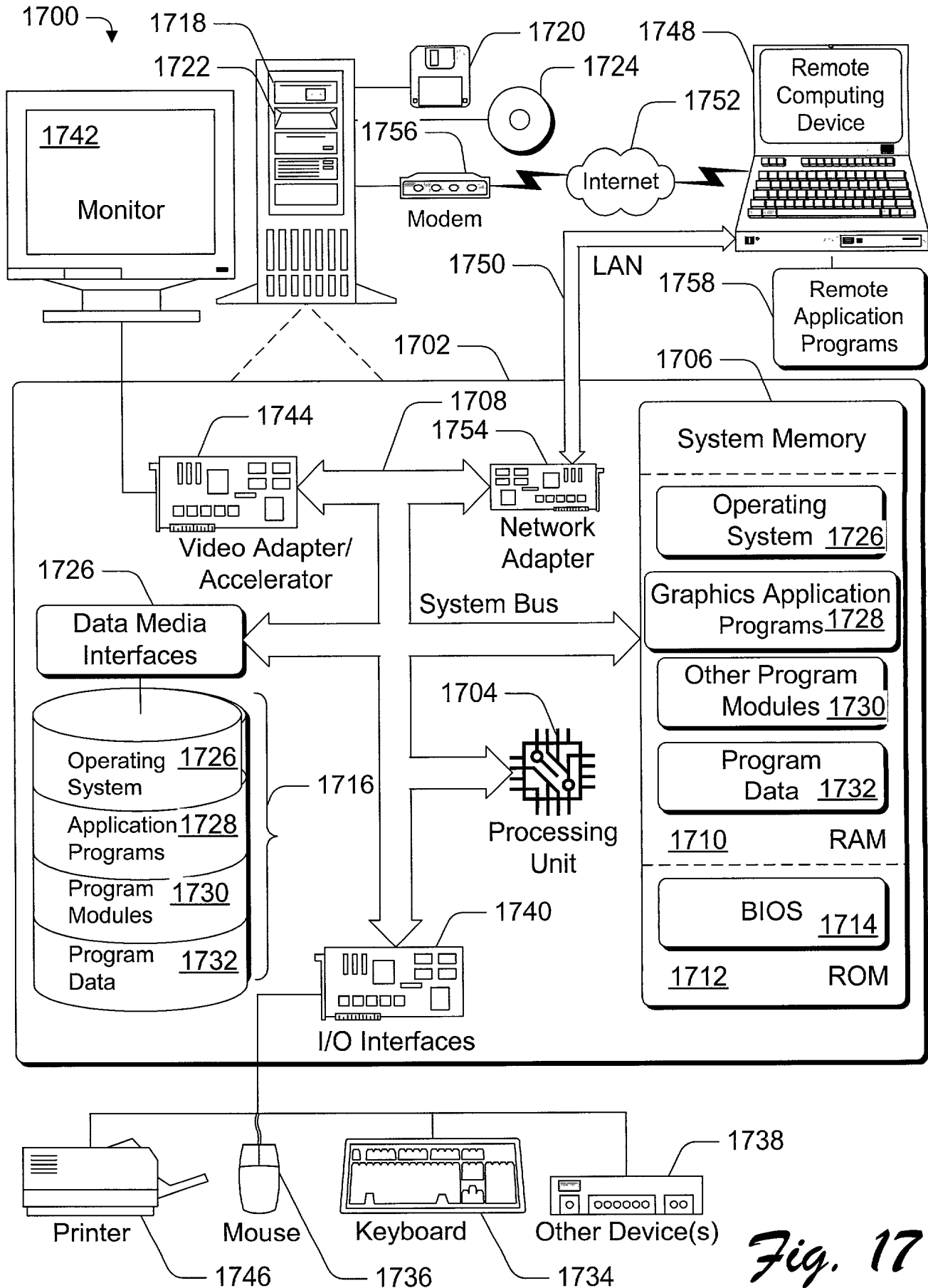


Fig. 17